## AMENDMENTS TO THE SPECIFICATION

Pursuant to 37 C.F.R. §1.121(b)(1), please replace the following paragraphs of the specification with the amended paragraphs below: paragraph on page 9, lines 6-15.; paragraph on page 13, lines 20-31; paragraph on page 18, lines 10-17; paragraph on page 18, lines 20-32; paragraph on page 19, lines 3-10; and paragraph on page 19, line 30 to page 20, line 9.

Paragraph on page 9, lines 6-15:

In order to obtain samples from gasses, several methodologies can be applied. One is to simply use the sterile filter in step a in the sampling phase by forcing the gaseous medium through the filter, and then subsequently applying the subsequent steps b and c – the properties of the filter should in such a case be suitable for obtaining samples from gasses and the skilled person will without any problems be capable of selecting a suitable filter; one widely used device for obtaining gas and air samples is ~~"Air-O-cell"~~ AIR-O-CELL® filter cassettes and the use of these are also contemplated in the context of the current invention. Alternatively, the gas is passed through a liquid trap facilitating accumulation of microbes in the liquid and subsequently subjecting this liquid to the method of the invention. In this case, the sample is gaseous, but the medium is in fact liquid.

Paragraph on page 13, lines 20-31:

Preferred devices are disposable closed, sterile filter devices, especially those that integrate the filter and a filter housing into one irreversibly closed structural unit; such filter devices cannot be opened without damaging the filter housing – they are commercially available such as those used in the examples herein. Because of their

small size (typically the longest cross-sectional axis of the closed, sterile filter device does not exceed a length of 10 cm, but smaller filter devices exist that do not exceed a length of 9 or 8 or 7 or 6 or even 5 cm) they are very well-suited for on-location sample preparation. A sterile filter device can be selected from commercially available closed/sealed filter units for filtration of liquids. The membrane material can be selected from any available membrane material including low protein binding ~~Durapore®~~ DURAPORE® (PVDF) membranes, nylon membranes, low protein binding hydrophilic LCR (PTFE) membranes, cellulose acetate etc. A presently preferred embodiment of the method according to the invention is the use of ~~Express®~~ EXPRESS® PES membrane.

Paragraph on page 18, lines 10-17:

Total bacterial counts were obtained using the acridine orange direct count (AODC). Aliquots were filtered on black ~~Nuclepore~~ NUCLEPORE™ polycarbonate 0.2-µm-pore-size filters at max 150 mm Hg. The filters were then washed with two volumes of 8 ml buffer (Citrate-phosphate, pH 5,2). Subsequently the filters were stained for 3 min with acridine orange (final concentration 0.02%), then washed twice with 3 ml sterilized ~~Milli-Q~~ MILLI-Q® water and mounted on microscope slides. Filters were analyzed using epifluorescence microscopy. For each slide at least 10 microscope fields were observed and at least 400 cells were counted per filter. The number of bacteria was calculated as number of bacterial cells per ml test sample.

Paragraph on page 18. lines 20-32:

A liquid test sample is filtrated through a 0.22 µm express 33 mm sterile ~~Millex~~ MILLEX® syringe driven filter unit (Millipore Corporation, Bedford, MA U.S.A.). Using a reusable plastic syringe, the filter unit is subsequently saturated with an

appropriate buffer containing enzyme substrate. The filter is incubated for a fixed time period. The incubation mixture is then washed out using 2 ml of a Glycine-NaOH buffer at pH 10.6 or obtained directly from the filter unit by applying air pressure using a reusable plastic syringe. An aliquot is collected with a pipette and transferred to a 10x10 mm plastic fluorescence cuvette (Sarstedt, Germany) or a 100 microlitre cuvette (Turner Biossytems, USA), respectively. The fluorescence output is measured on a customized ~~MycoMeter~~ MYCOMETER™ fluorometer (Turner Biosystems, USA) at an excitation wavelength of 365 nm and emission wavelength of 465 nm. The enzyme activity is reported as the fluorescence produced by the fluorophore 4-methylumbelliferone released upon enzymatic cleavage of the 4-methylumbelliferyl derivative. The activity is reported as fluorescence units/time unit/ml.

Paragraph on page 19, lines 3-10:

Drinking water was sampled from tap in the ~~MycoMeter~~ MYCOMETER™ laboratorium and yeast extract was added to a final concentration of 125 mg/l. The sample was then incubated at ambient temperature. Bacterial growth was monitored by OD 620 measurements on a spectrophotometer. When the bacterial growth reached late log phase (OD = 0.04) the drinking water was sampled for determination of heterotrophic plate counts (HPC). Aliquots of the drinking water were diluted 100, 250, 500, 750 and 1000 fold with filtrated autoclaved drinking water. Alkaline phosphatase (APase) activity was then determined in triplicate for each dilution according to the standard procedure described in the materials and methods section above.

Paragraph on page 19, line 30 to Page 20, line 9:

Drinking water was sampled from tap in the ~~MycoMeter~~ MYCOMETER™ laboratorium and yeast extract was added to a final concentration of 125 mg/l. The sample was then incubated at ambient temperature. Bacterial growth was monitored by OD 620 measurements on a spectrophotometer. When the bacterial growth reached late log phase (OD = 0.04) water was sampled for determination of APase activity according to the standard procedure described in the materials and methods section. The drinking water sample was diluted 100 fold with filtrated and autoclaved drinking water. APase activity was then determined in triplicate with varying incubation times of 15, 30, 45 and 60 minutes. Fig. 2 shows a scatter plot of APase activity vs. incubation time. The results demonstrate the linear relationship between incubation time and APase activity. Also the results demonstrate that the sensitivity of the method can be increased by simply increasing the time of contacting the sample with the substrate molecule.